

Amendments to the Claims

1. (Currently Amended) A rotor for an electric motor comprising
a cylindrical rotor core having a central aperture with a plurality of permanent magnets embedded in the rotor core, the permanent magnets extending radially about the central aperture and having an inner end and an outer end, wherein adjacent permanent magnets are grouped in pairs,

~~the rotor core being formed as an integral body; and at least two permanent magnets radially bridged by an inner recess in the rotor core~~

an inner recess adjacent the central aperture adjoining the inner ends of each pair of the permanent magnets;

a plurality of bridge butts adjacent the central aperture interposed between adjacent inner recesses; and

a radial bridge radially adjacent to each bridge butt interposed between adjacent inner recesses adjoining two permanent magnets from different pairs of permanent magnets.

2.-3. (Cancelled.)

4. (Currently amended) A rotor according to claim 1, wherein the at least two permanent magnets of a pair are magnetized in the same magnetic direction.

5. (Previously presented) A rotor according to claim 1, wherein the permanent magnets are enclosed by the rotor core at an outer end.

6.-8. (Cancelled).

9. (Previously presented) A rotor according to claim 1, wherein the recesses are filled with air or a non-magnetic medium.
10. (Previously presented) A rotor according to claim 1, wherein the rotor core further comprises a ferromagnetic material.
11. (Previously presented) A rotor according to claim 1, wherein the rotor core further comprises sheet metal laminations.
12. (Previously presented) A rotor according to claim 1, wherein the rotor core further comprises a plurality of slots for receiving permanent magnets.
13. (Currently Amended) A rotor for an electric motor comprising:
a rotor core having a central aperture and a plurality of permanent magnets embedded in the rotor core, the permanent magnets extending radially about the rotor core and having an inner end and an outer end, wherein adjacent permanent magnets are grouped in pairs;
the rotor core defining an integral body, ~~and~~
the rotor core defining a plurality of inner recesses to influence the magnetic field of the permanent magnets, wherein each inner recess adjoins the inner ends of a pair of permanent magnets and is enclosed by a pair of radial bridges and a pair of bridge butts, the pair of bridge butts located adjacent the central aperture interposed between adjacent inner recesses, wherein each radial bridge is located radially adjacent a bridge butt and adjoins two permanent magnets from different pairs of permanent magnets.
14. (Cancelled)

15. (Currently Amended) An electric motor comprising a stator and a rotor; the rotor having:

a core with a central aperture and a plurality of permanent magnets embedded in the rotor core and extending radially about the central aperture through the rotor core, ~~and~~ at least two permanent magnets being bridged at a radially inner radial end by an inner recess in the rotor core, the rotor core being coupled to a shaft and enclosed by the stator;

at least two permanent magnets bridged at a radially outer end by an outer bridge;

and

an outer recess located on a circumferential surface of the rotor proximate the outer bridge.

16.- 37 (Cancelled).